

A
ratio between the normal and reverse rotations establishes a relation 1 : 1.05-1.2, whereby the torque at the reverse rotation becomes greater.

5. (Amended) A hybrid electric vehicle employing a permanent magnet type dynamo-electric machine comprising:

a permanent magnet type dynamo-electric machine, said permanent type magnet type dynamo-electric machine having a stator having a stator iron core around which a stator coil is wound, and a rotor arranged in said stator and separated therefrom by a rotational gap, said rotor having a plurality of permanent magnets arranged and fixed within a rotor iron core in a peripheral direction, and having auxiliary protruding poles;

said dynamo-electric machine and an engine being connected to a drive shaft in series; and

O
no switching gear between forward and backward movements being provided; wherein,

a ratio between a maximum torque output by said dynamo-electric machine when the electric vehicle moves forward and a torque output by the dynamo-electric machine when reverse moving establishes a relation 1 : 1.05-1.2, whereby the torque at the reverse rotation becomes greater; and

a permanent magnet inserting hole provided within said rotor iron core is provided at a predetermined inclined angle (θ) with respect to a circumferential direction so that a distance from the rotational gap is greater in the normal rotation side of the dynamo-electric machine, and said permanent magnet is inserted to said inserting hole.

8. (Amended) A hybrid electric vehicle employing a permanent magnet type dynamo-electric machine as claimed in claim 2, wherein said inclined angle (θ) is 10 to 45 degrees (mechanical angle).

9. (Amended) A hybrid electric vehicle employing a permanent magnet type dynamo-electric machine as claimed in claim 5, wherein a cross sectional shape in the rotational direction of said permanent magnet inserting hole and said permanent magnet is a rectangular shape.

13. (Amended) A hybrid electric vehicle employing a permanent magnet type dynamo-electric machine as claimed in claim 5, wherein a cross sectional shape in the rotational direction of said permanent magnet inserting hole and said permanent magnet is an arc shape.

17. (Amended) A hybrid electric vehicle employing a permanent magnet type dynamo-electric machine as claimed in claim 5, wherein a ratio between a width in a rotational direction of the permanent magnet inserting hole provided